





an Open Access Journal by MDPI

Bacterial Infections in Aquaculture of Farmed Fish: Pathogenesis, Pathophysiology, Molecular Diagnosis, and Control

Guest Editor:

Prof. Dr. Eman Zahran

Department of Aquatic Animal Medicine, Faculty of Veterinary Medicine, Mansoura University, Mansoura, Egypt

Deadline for manuscript submissions:

closed (31 January 2024)

Message from the Guest Editor

Dear Colleagues,

One of the major constraints on aquaculture production is the susceptibility of farmed fish to diseases caused by husbandry practices or external factors such as pollution, climate change, or even shifts in the dynamics of product transactions in this industry. Fish have both innate and adaptive immune systems; when they encounter a pathogen, it triggers a cascade of defense mechanisms designed to attack the invader. Regarding the concept of a more sustainable aquaculture industry, bacterial pathogen infections have been widely recognized as a major obstacle. The economic impact of a disease outbreak on the aquaculture industry can be devastating, understanding the causes of such an outbreak is crucial. High-throughput technologies, such as molecular diagnostic techniques, can be useful characterization tools for identifying pathogens. Through a focus on pathogenesis, pathophysiology, molecular diagnosis, and therapies against bacterial infections in farmed fish, this Special Issue aspires to provide a suitable multidisciplinary forum for the exchange of valuable information.

Prof. Dr. Eman Zahran Guest Editor













an Open Access Journal by MDPI

Editor-in-Chief

Dr. Nico Jehmlich

Department of Molecular Systems Biology, UFZ-Helmholtz Centre for Environmental Research, 04318 Leipzig, Germany

Message from the Editor-in-Chief

"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC,

PubAg, CAPlus / SciFinder, AGRIS, and other databases.

Journal Rank: JCR - Q2 (Microbiology) / CiteScore - Q2 (Microbiology (medical))

Contact Us